



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 10/709,006      | 04/07/2004  | Hung-Jen Huang       | 12530-US-PA         | 3005             |

31561 7590 05/15/2008

JIANQ CHYUN INTELLECTUAL PROPERTY OFFICE  
7 FLOOR-1, NO. 100  
ROOSEVELT ROAD, SECTION 2  
TAIPEI, 100  
TAIWAN

|          |
|----------|
| EXAMINER |
|----------|

MOTSINGER, SEAN T

|          |              |
|----------|--------------|
| ART UNIT | PAPER NUMBER |
|----------|--------------|

2624

|                   |               |
|-------------------|---------------|
| NOTIFICATION DATE | DELIVERY MODE |
|-------------------|---------------|

05/15/2008

ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

USA@JCIPGROUP.COM.TW

|                              |                                      |                                     |  |
|------------------------------|--------------------------------------|-------------------------------------|--|
| <b>Office Action Summary</b> | <b>Application No.</b><br>10/709,006 | <b>Applicant(s)</b><br>HUANG ET AL. |  |
|                              | <b>Examiner</b><br>SEAN MOTSINGER    | <b>Art Unit</b><br>2624             |  |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 19 February 2008.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 03 August 2007 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

***Response to Applicants Arguments***

1. Applicants amendments/arguments filed on 2/19/2008 have been entered and made of record.
2. Applicant's arguments with respect to claims 12-12 have been considered but are moot in view of the new ground(s) of rejection.

***Rejections Under 35 U.S.C. 112***

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claims 1-12 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.
4. Re claim 1 Claims 1 states "...executing a debug analysis comprising syntax and semantics pre-check on the entire compressed image after the entire compressed image having been received". Applicant only mentions references the "entire compressed image" once in paragraph 27. However one of ordinary skill in the art

would not interpret the invention as described in the specification to be limited in this manner. Paragraph 27 States “In other words, the debug analysis is performed on the entire compressed image picture first, and when the result of the debug analysis indicates that there is no error data, it is determined that the compressed image picture is suitable for the subsequent decoding operation.” This paragraph only implies the debug analysis is preformed on the entire compressed image before the compressed data is decoded, this can also be seen in figure 3 where the analyzing is completed prior to the pipelined decoding process. However nowhere in the specification does it recite or imply that the entire performing debug analysis on the entire compressed image must be preformed after the entire compressed image picture having been received.

5. Re claim 3 Similar to claim 1 there is no evidence to suggest that the “entire compressed image” should be reloaded. Although reloading the compressed image is disclosed this does not imply that the entire compressed image be reloaded, it is common in the art to reload an image by reloading only a corrupted part. There is nothing in applicant’s specification to suggest that in applicant’s invention the entire image should be reloaded to reload the compressed image.
6. Re claim 4 Similar to claim 3 there is no evidence to suggest that a determination is made based upon if there is sufficient time for reloading the entire compressed

Art Unit: 2624

image. Again there is no implication that the entire compressed image must be reloaded to reload the image.

7. Re claim 5 claims 5 have similar problems as claim 4.
8. Re claims 2 and 6 these claims contain new matter because they depend from claim 1.
9. Re claims 7-12 these claims correspond to the method preformed by the apparatus of claims 1-6, claims 7-12 are likewise rejected.

### ***Rejections Under 35 U.S.C. 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claims 1, 2, 4, 5, 7, 8, 10, and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Van Den Branden EP 1056297 in view of admitted prior art (APA).

11. Re claim 1 Van Den Branden discloses An image decompressing circuit, comprising: a variable length decoding unit ( video decoder paragraph 69), for receiving a compressed image picture (retrieve frame paragraph 69) and executing a debug analysis (examining marker bits paragraph 59) syntax and semantics (paragraph 69 and 70 note marker bits can include markers for syntax and semantic errors) pre-check on the entire compressed image picture ( paragraph 70 note the entire frame is checked) after the entire compressed image picture having been received (retrieve frame paragraph 69), wherein when a result of the debug analysis indicates that the entire compressed image picture is suitable for a subsequent decoding operation ( marker bit does not indicate an error paragraph 70) executing a decoding process (paragraph 70) on the compressed picture;
12. Van Den Branden does not specifically disclose executing a decoding process in pipeline on the compressed image picture, An image picture recovery unit, electrically coupled to the variable length decoding unit, for performing an inverse quantization, an inverse discrete cosine transformation and a motion compensation with a pipeline process after the compressed image picture has been decoded with the pipeline process, so as to recover the compressed image picture. The APA discloses, executing a decoding process in pipeline on the compressed image picture (background paragraph 6), An image picture recovery unit (paragraph 6), electrically coupled to the variable length decoding unit, for performing an inverse quantization (paragraph 6), an inverse discrete cosine transformation (paragraph 6) and a motion compensation (paragraph 6) with a pipeline process after the

compressed image picture has been decoded with the pipeline process (paragraph 6), so as to recover the compressed image picture. The motivations to combine are to that these processes are necessary in MPEG decoding and pipeline processing well known to increase processing speed. Therefore it would have been obvious to combine the APA with Van Den Branden.

13. Re claim 2 Van Den Branden further discloses wherein when the variable length decoding unit performs the debug analysis on the entire compressed image picture and finds no error data ( marker bit does not indicate an error paragraph 70), the entire compressed image picture is determined suitable for the subsequent decoding operation (note when there is no error decoding continues paragraph 70).
14. Re claim 4 Van Den Branden further discloses wherein when the variable length decoding unit performs the debug analysis on the entire compressed image picture and finds more than a predetermined number of the error data (extent of error paragraph 79) and there is no sufficient time to reload the compressed image picture, the entire compressed image picture is aborted (decoding is not attempted paragraph 79 resumes decoding at the next image (i.e. erroneous data is the entire image) paragraph 75).
15. Re claim 5 Van Den Branden further discloses wherein when the variable length decoding unit performs the debug analysis on the entire compressed image picture

and finds less than a predetermined number of the error data (extent of damage paragraph 79) and there is no sufficient time to reload the compressed image picture, the compressed image entire picture is determined suitable for the subsequent decoding operation (paragraph 79 decode the erroneous data paragraph 75 note the erroneous data can be the entire picture).

16. Re claims 7, 8, 10 and 11 these claims correspond to the method preformed by the apparatus of claims 1, 2, 4, and 5 claims 7, 8, 10 and 11 are likewise rejected
17. Claims 6 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Van Den Branden in view of Lavallee et al US 5,267,242.
18. Re claim 6 Van Den Branden discloses all of the elements of claim 1 Van Den Branden does not disclose wherein the variable length decoding unit can selectively turn on or turn off the debug analysis (ECC logic column 5 lines 5-10) function for the compressed image picture. Lavallee discloses selectively turn on or turn off (column 5 lines 5-10)the debug analysis function for the data. The motivation to combine is that “the ECC logic can be enable or disabled” (see column 5 lines 5-10).
19. Re claim 12 this claims is the method preformed by the apparatus in claim 5 and is likewise rejected. (See rejection for claim 6).

### ***Conclusion***



Any inquiry concerning this communication or earlier communications from the examiner should be directed to SEAN MOTSINGER whose telephone number is (571)270-1237. The examiner can normally be reached on 9-5 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bhavesh Mehta can be reached on (571)272-7453. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Bhavesh M Mehta/  
Supervisory Patent Examiner, Art Unit 2624

Motsinger  
5/12/2008